## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :

Hirotoshi TAKAHASHI et al.

Serial No. NEW : Attn: APPLICATION BRANCH

Filed July 3, 2003 : Attorney Docket No. 2003 0924

MODULATOR AND DEMODULATOR (Rule 1.53(b) Divisional of Serial No. 10/036,428, Filed January 7, 2002)

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of [X] the references listed on attached form PTO-1449 and/or [] the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. 10/036,428.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

and thus no certification and/or fee is required.

1b.	[] This Information Disclosure Statement is submitted							
	after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the							
	application, and thus:							

- (1) [] the certification of paragraph 2 below is provided, or
- (2) [] the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.
- 1c. [] This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

## 2. It is hereby certified

- a. [] that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
- b. [] that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.
- 3. [] Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4.	For each non-English language reference listed on the attached form PTO-1449, refer is made to:									
	a.	[]	a full or partial English language translation submitted herewith,							
	b. [] a foreign patent office search report (in the English language) subherewith,									
	C.		the concise explanation contained in the specification of the present application at page,							
	d.	[]	the concise explanation set forth in the attached English language abstract,							
	e.	[]	the concise explanation set forth below or on a separate sheet attached to the reference:							
5.	5. [] A foreign patent office search report citing one or more of the references is enclose									
			Respectfully submitted,							
			Hirotoshi TAKAHASHI et al.							
			David M. Ovedovitz  Registration No. 45,336  Attorney for Applicants							
DMO/j										
	_	-	C. 20006-1021							
ı elepn	one	(202)	721-8200							

Facsimile (202) 721-8250 July 3, 2003

Sheet 1 of 1												
FORM PTO 1449-(modified)  U.S. DEPARTMENT OF COMMERCE PATENT AND TRĂDEMARK OFFICE  LIST OF REFERENCES CITED BY APPLICANT(S)				ATTY DOCKET NO. 2003_0924		SERIAL N	SERIAL NO. NEW					
				APPLICANT Hirotoshi TAKAHASHI et al.								
(	(Use sever	ted to PTO: July 3, 200		FILING DATE July 3, 2003			GROUP 2817					
	U.S. PATENT DOCUMENTS											
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	Cī	LASS	SUBCLASS	UBCLASS FILING DATE IF APPROPRIATE				
	AA	5,825,242	10/1998	Prodan et al.								
	АВ	5,535,245	7/1996	Kim								
	AC		<u> </u>		<u> </u>	<del></del>						
	AD				<u> </u>							
	AE											
	AF				<u> </u>							
	AG											
	АН				<u> </u>	<del></del>						
	AI											
<del></del>			FORF	EIGN PATENT DOCUMENTS	т—		<del></del>					
<del></del>		DOCUMENT NUMBER	DATE	COUNTRY CLASS SUBCLASS TRANSLATION YES NO								
	AJ				<u> </u>							
	AK				<u> </u>							
	AL											
	АМ				ļ							
	AN					·						
	т т	OTHER D	OCUMENT(S) (Inc	cluding Author, Title, Date, Pertin	ent Page	es, Etc.)						
	AO											
	АР											
	ΑQ											
EXAMINER				DATE CONSIDERE	 ED							

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.